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VOICE OF THE ELECTRIC UTILITY INDUSTRY

WAR on Iraq!

A continuing first strike by U.N. air forces starting Jan. 16 caused a surge, then steep drop in oil prices; financial markets soared. Iraqi power plants and dams may be targeted, after military sites. The **NRC told U.S. nuclear plant operators** to guard against possible terrorism. The **Justice Department urged added security** at all major U.S. facilities. Initially, Iraq struck back at one Saudi oil storage tank. With the U.N. offensive, Bush said the **strategic oil reserve would open** to sales for 30 days. Prior to war, oil prices jumped on speculation. With the world oil glut, summer oil prices might stabilize below $25/bbl.

In other news, (South) **Korea Electric Power** Co. plans to spend $61.2 billion by 2001, in part for five nuclear units. Canada sells a 700-MW CANDU unit. **Several recent** climatological reports indicate record global temperatures in 1990—March *EL&P*.

Tucson Electric Power faces write-off

Utility reorganizes financing, debts; deadlines, bankruptcy looms

TUCSON, AZ—Tucson Electric Power Co. lost two challenges to regulatory orders that may require a $350-million charge against earnings, pushing the utility further toward seeking bankruptcy protection.

As of Jan. 9, TEP said it was studying if it would appeal, or if it would take the charges together, or in increments over several years.

In other news, the utility obtained an extension on a $70-million credit line from Dec. 31 to the end of January. A TEP spokesman wouldn't speculate on actions if efforts to renegotiate credit failed.

The Dec. 24 court decision came after a drastic Dec. 10 move to suspend all preferred-stock dividends, nearly $10 million per year, to improve cash-flow. The company already had cut pay of senior officers and board members and announced a salary freeze for all other managers. Common stock dividends were eliminated in January 1990, saving $100 million per year.

The utility has been stressed by diversification that didn't work and investments in generating resources.

The state court decision in Phoenix upheld two 1989 orders by state regulators. One concerned a purchased power contract with Century Power Corp., formerly a subsidiary. Regulators allowed recovery of 75 percent of what the contract cost TEP. TEP maintains that regulators based decision-making on current market conditions, rather than

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Ocean State Power IPP operates commercially

BURRILLVILLE, RI—Ocean State Power (OSP) unit one began commercial operation Dec. 31, 1990. Ground breaking was in January '89.

The $460-million, gas-fired, combined-cycle electric generating plant may be considered the nation's first independent power project. IPPs are expected to provide more than half the industry's new generation over the next 10 years. The 500-MW OSP will also be the first baseload power plant constructed in New England in more than a decade, according to the owners.

The second of two 250-MW units is expected to begin commercial operation this fall.

Two utility holding companies are two of four partners in the project. A creative partnership structure bypasses restrictions in the Public Utility Holding Companies Act of 1935.

Since it produces electricity, and doesn't cogenerate steam, OSP doesn't fit the "qualifying facilities (QF)" guide-

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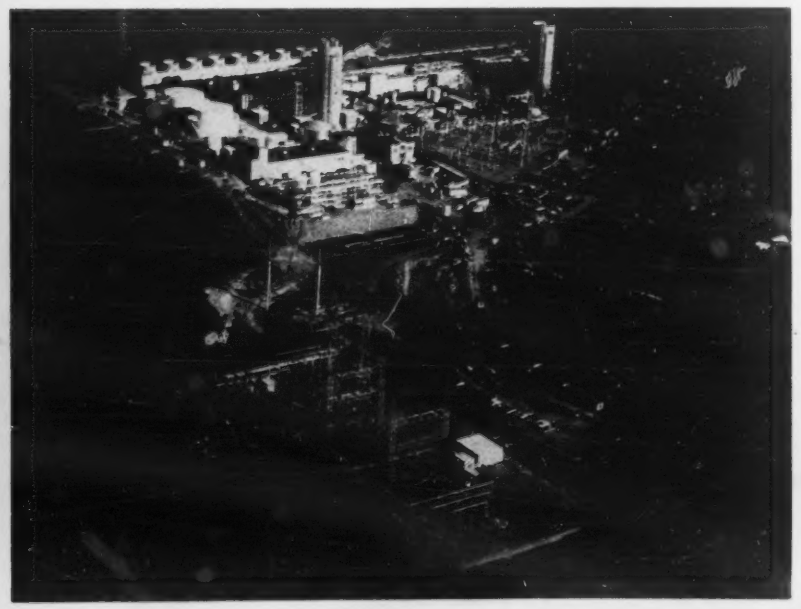

Ocean State Power unit 1 begins commercial operation, the first of two 250-MW, gas-fired, combined-cycle units. Among the first large independent power projects, it serves four New England utilities.

U.S. energy strategy: White House debates controversial issues

WASHINGTON--President Bush may delay the National Energy Strategy until after the Persian Gulf Crisis is resolved, say some reports. Other NES components could emerge in the Jan. 28 State of the Union Address.

The NES, formed by the Department of Energy over the past 19 months, appears to face debate in the administration among those opposed to policies supporting conservation over free-market initiatives (*EL&P*, Jan., p.4).

Heavy U.S. reliance on oil and related energy policies may explode into the forefront with an Iraq war or military action. As of early Jan. 16, prospects for peace seemed dim. Iraq had not withdrawn from Kuwait, called the United Nation's Jan. 15 deadline ilegal, and continued to prepare for war.

Politically charged issues—such as mandatory conservation measures, oil drilling in environmentally sensitive areas, and promoting renewable energy and nuclear power—may have become points of debate in the final stages of forming NES. These may be future points of argument between the administration and Congress and within Congress.

Conditions named on NU/PSNH deal; UtiliCorp acquires

Mark T. Hoske
News Editor

WASHINGTON—The proposed $2.3-billion merger of Public Service Co. of New Hampshire with Northeast Utilities received several approvals recently.

Both utilities anticipate that PSNH will emerge from three years of bankruptcy reorganization during the first quarter and complete the merger with NU by early summer.

Major outstanding issues—as of mid-January—for PSNH to emerge from bankruptcy were: securing of financing, a decision from the New Hampshire Supreme Court on an appeal of the rate-package approved by state regulators, and a $190-million claim by an unsecured creditor that could give NU the option of pulling out of the deal.

In other merger news, UtiliCorp agreed to purchase Centel Corp.'s Kansas and Colorado electric utilities for $346 million (*EL&P*, Jan., p.1; details below).

SEC approves

The Securities and Exchange Commission unanimously approved the PSNH-NU merger late last December. In a separate and non-binding action, an administrative law judge (ALJ) at the Federal Energy Regulatory Commission approved the merger, with conditions. FERC itself must vote on the proposal. Jan. 9 was the deadline for parties filing comments to the ALJ recommenda-

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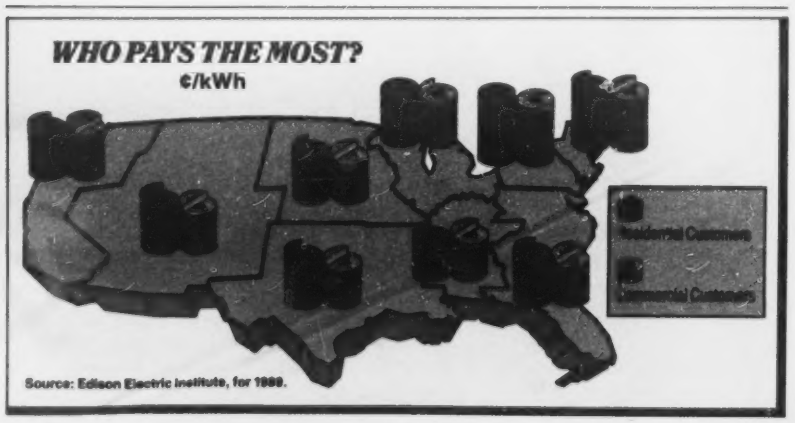

News Briefs

JILL MINNER, Special Projects Editor

WWP buys CP National gas distribution assets

The Washington Water Power Co. (WWP) said it has purchased all of the natural gas distribution assets of CP National Corp., an ALLTEL subsidiary, for $85 million. ALLTEL announced its intention to sell CP National's natural gas distribution systems in September, according to WWP. The properties were acquired by ALLTEL as part of its 1988 acquisition of CP National Corp. WWP, a combination electric and natural gas utility, serves approximately 250,000 electric and 93,000 natural gas customers in eastern Washington and northern Idaho.

VA SCC adopts filing requirements for IPPs

The State Corporation Commission recently adopted filing requirements for independent power producers (IPPs) in Virginia. IPPs must apply to the SCC for a certificate of public convenience and necessity, authorizing construction of facilities. Criteria considered by the SCC includes: need, cost, reliability, and preferred alternatives in relation to the utility that would purchase the IPP power.

According to the commission, the adopted standards not only will help determine whether or not to grant a certificate and approve a proposed project, but also will provide IPPs and utilities with an outline of the requisite information that must be included in an IPP certificate request.

New electric service standards proposed

The New York State Public Service Commission has proposed a new set of electric-service reliability and quality standards. Under the proposal, each electric utility would be required to develop programs to identify in detail specific actions to ensure adequate service is provided to consumers. A company's success in implementing those programs would be measured by its ability to meet established "objective" and "minimum" service reliability levels set by the commission. According to the PSC, the service reliability levels are individually designed or "customized" for each utility service territory. The proposed standards, which are pending final approval, are scheduled to go into effect in June 1991.

More customers using natural gas for heating: Idaho Power survey

According to a Residential End-Use Survey conducted by Idaho Power, electricity's share of customer space- and water-heating use is declining. The survey found that 79.2 percent of Idaho Power residential customers use electricity to heat their water and 17.9 percent use gas—a growth of 2.9 percent for gas and a 3.1-percent decline for electricity from 1988. For primary space heating, 41 percent of Idaho Power customers used electricity and 32.5 percent used gas—a 3.8-percent gain for gas and a 1.2-percent drop for electricity since 1988.

Taxes up by $760M for investor-owned utilities in 1989, EEI reports

Federal income tax expenses for investor-owned electric utilities totaled more than $5.28 billion in 1989, a $760-million increase from the previous year, according to the Edison Electric Institute. "The investor-owned electric utility industry continues to be one of the most heavily taxed industries, as well as a major tax collector on behalf of federal, state and local governments," stated EEI President Thomas R. Kuhn.

EEI also said that, according to Internal Revenue Service figures, the average state and local tax rate for investor-owned electric utilities was more than twice the average of all U.S. corporations in 1985.

Seabrook gets high marks in NRC review

In its Systematic Assessment of Licensee Performance report, the Nuclear Regulatory Commission gave New Hampshire Yankee's (NHY) Seabrook Station a "superior" performance rating in two of seven categories. According to operator NHY, the superior ratings were given for emergency preparedness and security and safeguards, while all other areas were given a "good" rating.

The 16-month review covered the plant's preparation for full-power licensing, power ascension testing and initial full-power operation, according to NHY. "The NRC has provided us with a comprehensive assessment of our operations here at Seabrook Station, and has highlighted some items we need to work on. This report will be very helpful for us as we continually strive to improve our performance," said NHY President Ted C. Feigenbaum.

Industry trends, EMF, deregulation discussed at EWRT conference

The Electrical Women's Round Table, Inc. (EWRT) National Conference, held recently in Minneapolis, MN, covered a variety of topics including some issues affecting the electric utility industry.

Ken Wiley, general manager of Florida Electric Power Coordinating Group, described the Electromagnetic Fields issue as the "Acid Rain of the '90s," according to EWRT. Wiley feels that state legislation is needed to regulate magnetic field standards and that electric utilities should request these standards.

Edison Electric Institute's Elizabeth Stipnieks spoke on the deregulation of U.S. utilities. She stressed that a broad, long-range electric strategy, focusing on security, certainty and flexibility, will be needed in the future.

Increasing industry costs, environmental concerns, and the uncertainty of peaking capabilities are some of the major concerns that the electric utility industry will face in the years ahead, according to Northern States Power Co. Chairman and CEO Jim Howard. Howard says the country is in need of a comprehensive energy policy with rate flexibility and a common approach for electric utilities.

Westinghouse, Skoda are partners in global power market

Westinghouse Electric Corp. announced that it will team up with Skoda of Plzen and Prague, Czechoslovakia, for a long-term business and technology association in the global power systems business.

The companies will design, manufacture and construct the next two nuclear units and all fossil-fueled power plants to be built in Czechoslovakia, according to Westinghouse. They will also team in cooperative technology development, engineering and marketing ventures aimed at modernizing and upgrading Czechoslovakia's existing fossil-fueled and nuclear power plants.

"The electrical energy generation products that are engineered and manufactured here are of world-class quality. Skoda, with its 130-year tradition of excellence, has a bright future in the international power systems business, and Westinghouse is pleased to be part of that future," said John B. Yasinsky, Westinghouse executive vice president of power systems.

APS redesigns monthly service statement

Arizona Public Service Co. has redesigned its monthly bill in order to better communicate with and serve customers while controlling costs, according to APS Director of Corporate Relations Scott Jacobson. The new statement is easier to read and provides more helpful and personalized information about the customer's account. "We list various programs and services available from APS," explained Jacobson. APS said many of the bill changes were made as a result of customer comments.

The introduction of the new statement coincided with delivery of the utility's new bill insertion system. "We expect the new machinery to save the company at least $150,000 annually, enabling us to recover the cost in less than three years," Jacobson added.

Starr awarded National Medal of Technology

Chauncey Starr, founding president of the Electric Power Research Institute, recently was awarded the National Medal of Technology by President Bush. According to the American Nuclear Society, Starr was cited for: contributions to energy production and policy, pioneering work in the development of nuclear energy, developing risk assessment and risk management concepts, organizing EPRI, leadership in engineering education and contributions to a technically trained U.S. work force.

The award is given for exceptional contributions to the well-being of the nation through the development or application of technology.

Personnel briefs

Richard E. Disbrow was named president and chief executive officer of **American Electric Power Co. Inc.** He succeeds W.S. White Jr., who will continue as chairman until he retires at the end of 1991.

New England Power Co. has appointed George P. Sasdi president.

Daniel Landguth has been elected chairman, chief executive officer and president of **Black Hills Corp.** He replaces Larry Owen, who retired.

Utilities fined by NRC

The U.S. Nuclear Regulatory Commission recently proposed the following fines:

Baltimore Gas & Electric
A $12,500 fine for alleged violations involving security at the Calvert Cliffs nuclear plant.

Commonwealth Edison
A $37,500 fine for a violation of NRC requirements at the Dresden Nuclear Power Station. ComEd was cited for failing to keep the reactor containment adequately sealed against leakage during periodic air sampling of the containment.

Entergy Operations Inc.
A $50,000 fine for alleged violations of NRC requirements at the Arkansas Nuclear One facility. An NRC team determined that, in some circumstances, the ANO control room emergency ventilation system possibly would not have been isolated from the normal plant system if accident conditions made it necessary.

NY Power Authority
A $50,000 fine for the alleged inattentiveness of two NRC-licensed reactor operators on duty in the control room at the Indian Point 3 plant. In addition to fining the NYPA, the NRC issued letters of reprimand to the two operators.

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COMMENTARY

There are no shortcuts to success as a world leader

Amid the strident voices of protesters to U.S. initiatives in the Middle East in late January was one that was especially irritating...because while I couldn't agree with the protest's intent, I couldn't deny some of the logic. It was the voice of a young man who latched onto a bit of truth in his simplistic reasoning for why we shouldn't be in Saudi Arabia. He declared that if we would just end our dependence on foreign oil we wouldn't have to send troops to the region.

Actually, he didn't say "end our dependence." He really said stop using so much energy, especially oil, and then war would be unnecessary.

A simplistic argument to be sure. We are in Saudi Arabia for several reasons, a major one of which is the support of an ally, Saudi Arabia, and to liberate Kuwait following Iraq's invasion and rape of that tiny nation.

But *part* of the reason that the U.S. is in Saudi Arabia certainly is oil-related, and not just to satisfy our own immediate needs. The societies of the world are heavily dependent on oil to power their economies. Developing and third world nations need Mideast oil. Japan and many European nations need oil from the Gulf. Oil is too vital a commodity for world economic health to allow its supply to be potentially subject to the whim of the Butcher of Bagdad.

In response to Iraq's actions, the U.S. has acted like the world leader it is by pursuing first a peaceful solution to the problems of the area, then, when peaceful attempts failed, by committing our armed forces to putting an end to the strongarm politics of Saddam Hussein.

We are confident that the U.S. and its allies will prevail. We pray that the conflict will be short and that the loss of life, on both sides, will be small. We hope that the conflict can remain what it is at this writing...a battle to right a grevious wrong and to return the sovereign country of Kuwait to its people, and not become the Holy War Saddam Hussein seeks to make it.

The way of world leadership is neither easy nor cheap. But we cannot escape our responsibilities. We are a world leader. We must lead.

And that returns me to my original concern. The protester was right to a degree. We are dependent on foreign oil to satisfy our still growing energy thirst. Had we learned from the lesson we were exposed to in the mid-'70s, we might be playing a different, and far less costly, role today.

In the late 1970s we had a viable, growing nuclear power industry destined to provide more and more electricity cheaply and safely. We had launched alternative energy programs to develop synthetic fuels. Remember Project Independence...the national development program to cure our foriegn petroleum addiction? We were committed to finding alternate options.

Sure we were! But as soon as the oil spigot was turned on again, and oil prices fell, good intentions evaporated. Congress couldn't wait to start spending designated funds in other areas. Like the farmer who never fixed the hole in his roof because when the sun shone it wasn't necessary, and when it rained it was too wet to go up on the roof, our government killed projects, some very promising, designed to reduce foreign-oil dependence. "Why spend good money to find alternatives when oil is plentiful and cheap again?"

We ran into problems with our nuclear program; politics added months and years to nuclear plant construction schedules and billions to their cost. The Congress stampeded into adopting clean air regulations far beyond rational limits. Our energy options are reduced, and it looks a lot like 1975.

The lesson is there again. Will we remember it after the threat of Saddam Hussein is no more. Will Congress just once make and stick to a decision based on long-term benefits? Can we afford *not* to reactivate the nuclear initiative? Can we afford irrational clean air regulations?

The protestors were wrong in suggesting oil was the only reason we went to war. But it was *one* of the reasons we went to war. And if this nation doesn't do something to end its dependence on foreign oil, we'll face more wars 10, 15 or 20 years from now. The handwriting is on the wall again. Isn't it time that Congress read...and act...upon it? Now is the time to demonstrate our leadership by example, not by words.

—Robert A. Lincicome, EL&P Editor-in-Chief

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LETTERS

Weather-related operations

I read your special report and the related articles in the December issue with a good deal of interest. I am currently involved in the investigation of two major transmission line failures that occurred because the line-design loads were under-specified for the locations.

I think you did the industry a good service by reminding utilities they should stay alert. We have gone through a long period where extreme weather events have not been happening with expected regularity. One of these days Mother Nature and the Gods of Probability are going to collaborate to restore the norm.

The article by Kramer and Castelli did not give any indication as to what Meteorological Evaluation Services Inc. is or does. It sounds like a consulting firm—but I frankly haven't heard of them. The article suggests that information on snow and ice occurrence is available. I would like to communicate with them and find out what is available and how to gain access to it. Could you supply me with an address or a phone or FAX number?

Joe Pohlman
Consultant
Pittsburgh, PA

Ed. Note: For all our readers, here is the requested address: Meteorological Evaluation Services Co., Inc.; 165 Broadway; Amityville, NY 11701; phone (516)691-3395 or FAX (516)691-3550.

Zimmer starts; SMUD conserves with trees; Indiana grid problems feared

BARRINGTON, IL—Utility power supply and demand news follows:

Zimmer begins testing

The Zimmer power plant, expected to begin commercial operation in April, started testing Jan. 1. In January, the 1300-MW coal-fired unit was still $270 million under the $1.3-billion budget. The plant has been converted from a partially built $1.7-billion 800-MW nuclear plant into a coal unit.

American Electric Power Co. managed the first-of-its-kind conversion and owns part of the plant. Other owners are DPL Inc. subsidiary of Dayton Power & Light Co., and Cincinnati Gas and Electric Co.

SMUD evaluating bids, electric vans

The Sacramento Municipal Utility District continues to evaluate 28 non-utility generation capacity proposals representing about 4000 MW. From this, the district will choose 1000 MW of supply to replace various power contracts and another 100-200 MW to support transportation electrification. SMUD is working with a regional transit group on electrification of transportation in the Sacramento area, starting with a test of three electric vans.

The criteria for selecting winning proposals should rely first on environmental factors, according to ratepayer opinions expressed at a public meeting.

SMUD expects that its Conservation Power program and other conservation efforts will "supply" another 1000 MW. As part of that program, 30 energy auditors were hired in the fourth-quarter 1990. A cooperative effort with the Tree Foundation aims to plant a million trees in the region over 10 years; placement can save air conditioning load.

Preliminary results indicate SMUD might have come out 85 million under its 1990 budget, but any benefits could be reduced due to a cold snap requiring purchase of expensive oil-generated power, a spokeswoman said.

RGE gets 1564 MW of intent

Rochester Gas and Electric Corp. said 71 firms submitted 108 notices of intent to bid to provide up to 50 MW of generating capacity and at least 20 MW of conservation and load-management capacity savings.

The supply-side intent totalled 1564 MW, ranging in size from 0.5-50 MW, averaging 31 MW. Natural gas and a small number of projects using coal or waste comprised the majority of fuels. Demand-side bids totalled 176 MW, from 0.1-20 MW, averaging 4 MW. Although the majority of these were commercial and industrial, there was also significant interest from bidders in residential and institutional/government customers, RGE said.

Positive indication

"We are looking for peaking capacity, and the large number of sponsors who are prepared to offer dispatchable resources is a positive indication that the results will benefit the company and its ratepayers," said Paul Ruganis, manager of corporate planning and demand-side management.

Although notices of intent to bid were requested by Nov. 12, '90, RGE said on Dec. 14 that these non-binding expressions of interest still may be submitted and do not commit sponsors to a proposal in March '91.

Safe Allegheny workers

Employees at 13 coal-fired and 10 hydroelectric power stations in the Allegheny Power Sustem completed more than 2-million man-hours on the job without a lost-time injury as of Dec. 1, '90. The last lost-time injury was March 21, '90. A total of 1438 employees in West Virginia, Pennsylvania and Maryland worked to achieve the safety record.

NIPSCO fears reliability trouble

No hearing dates were set as of Jan. 7 for NIPSCO's challenge of FERC's order approving PSI Energy Inc.'s proposal to sell 450 MW at market-based rates and allow open access to the system.

NIPSCO appealed the decision to the U.S. District Court of Appeals for the District of Columbia.

NIPSCO challenged the Federal Energy Regulatory Commission decision saying reliability and quality of service on the NIPSCO system can be compromised by the action, new unnecessary construction could be necessitated and existing wholesale contracts could be impared. The utilities share a border in Indiana and are interconnected.

"Paper" hearing

Further, NIPSCO said, FERC didn't conduct an evidentiary hearing—only a "paper" hearing, and quashed subpoenas seeking engineering evidence as to whether the approved transactions would adversely affect NIPSCO and its customers.

NIPSCO has prepared videotapes explaining its position on reliability and transmission.

Outsourcing: Competitive utility weapon of the '90s

George M. Hill
Worldwide Mng. Partner, Utilities Industry
Andersen Consulting

The push to be more competitive, to satisfy customer needs better and use information to strategic advantage is generating increased interest in "outsourcing" among utilities.

An organization outsources by turning over all of its information technology functions to an outside contractor. For a utility company, this might mean outsourcing the data center and the communications network to a contractor. The contractor manages the day-to-day operations and meets defined objectives, receiving compensation on a contract-services basis.

While the overall concept of outsourcing has been around for years, today's approach is more strategic than functional. In the past, companies outsourced computer operations as a quick fix to lower costs or fill information needs they couldn't handle in-house. Now, while outsourcing still is a cost deflator, companies seek value-added outsourcing partners, not just sellers of computer services—partners who will take equity stakes in relationships and share risks.

Eastman Kodak's decision last year to farm out its entire computer operations to several outside contractors helped authenticate outsourcing as a viable, strategic weapon among major companies. They learned that outsourcing was more than cost-cutting or shipping out information technology (IT) tasks. Kodak chose to outsource to support its corporate strategic goals, by choosing to focus on its core businesses rather than running data centers.

Outsourcing has become a booming industry, valued at almost $5 billion in the U.S., with possible growth to $50 billion by 1994. The Yankee Group, a research organization, predicts that 20 percent of the largest information technology users will outsource some of their information systems in 1991, while the remaining 80 percent will at least consider the subject.

Scenario for a utility

The outsourcing boom hasn't quite reached the utility industry yet. But there is growing interest in the concept. Several months ago, Philadelphia Electric Co. received media attention as a result of pursuing outsourcing as part of a cost-reduction program. A number of other utilities also are investigating or beginning outsourcing programs.

Although the factors driving outsourcing are common across all industry groups, utilities face their own set of considerations.

Many utilities are rethinking their total business missions, due in large part to the fast-changing non-regulatory environment. Deregulation has thrust many energy providers from their safe, controlled and protected environments into a more threatening competitive one. This, and intensified financial pressures have led many utilities to downsize in order to be "lean and mean" for the '90s. They realize the need to be more sensitive and responsive to the needs of their customers and to become market-driven.

Like other industries, utilities also are coming to realize they need to use information more effectively, to link systems and integrate even once-distant operational islands into a unified whole. They know that their entire operation—engineering, construction and operation of power generation, transmission and distribution systems, maintenance, service, sales and customer relations—must share and use information collectively, with faster responses to customer needs and demands.

To be competitive, utilities need to integrate IT into every product and service they produce and offer.

Unfortunately, many utilites are saddled with outmoded computer equipment and cumbersome systems that are not compatible and cannot communicate with each other. These cannot realize the full value of the considerable information they have in-house, or gain from the resource and expertise of a skilled outsourcing provider. In such cases, upgrading and modernization is essential.

Outsourcing guidelines

Utilities are faced with a three-part question: How do I decide if outsourcing makes sense for my utility; if it makes sense, what can I expect from my outsourcing partner; how do I begin?

Companies tend to enter outsourcing relationships with one of five objectives:

1) To manage existing operations while developing new systems. To improve customer service, a utility may need to develeop and implement new systems. An outsourcing provider can maintain day-to-day computer functions, allowing utility MIS personnel to focus on developing new systems.

2) To meet information needs not readily satisfied in-house. Utilities, especially after downsizing, may not have the necessary personnel to handle complex IT requirements. Outsourcing providers can help fill specialized roles.

3) To reduce costs and leverage existing assets. A utility may need to divest some operations to an outsourcing provider in order to reduce costs. The utility benefits by changing fixed costs to variable costs and gaining access to greater resources, research and skilled personnel than it previously had.

4) To capture the market value of existing assets. A utility could sell its systems and software to an outsourcing contractor. The outsourcing partner then would sell services back to the utility and market excess capacity to other clients. The utility has access to up-to-date information, but no longer runs a computer factory, rids itself of aging hardware and gains systems flexibility.

5) To enter an information- and technology-intensive business. Outsourcing can enable the utility to enter new businesses by leveraging off the systems and support functions of its outsourcing partner. The partner may invest cash and/or services in the enterprise for a performance-based return.

Once the decision is made to proceed with outsourcing, a utility's decision-makers need to ask these questions of their outsourcing partner:

√ Do the partner's objectives fit the utility's strategies?
√ Does the partner have the requisite industry experience?
√ Does the partner have the staying power and long-term commitment?
√ Is the partner sensitive to people issues and needs within the organization?
√ Is the partner flexible in entering and exiting business arrangements?
√ Can the partner provide the necessary technology for 21st century solutions?
√ Is the partner objective?
√ Does the outsourcing partner have a track record of managing delivery risk?

New corporate framework needed

Outsourcing is one of the most mission-critical projects a chief information officer will likely undertake. It will require careful planning. The right corporate framework can help support and drive the project. Here are suggestions for this framework.

1) Secure top-level commitment. The project should have solid, unwavering support from the CEO and board of directors. Active leadership from the top will overcome any obstacles and arguments against change from operations managers.

2) Involve key managers, utility-wide. The CEO needs to assemble a core team of operations managers to assess business processes, target areas for change and see them through. These are all part of rethinking how the company works. Teamwork, purpose and commitment is required.

3) Develop a tactical plan. A comprehensive plan that outlines project and management responsibilities, and sets deadlines, must be formed. It should discuss the technology to be used, with appropriate timetables and budgets.

4) Attend to change-based personnel concerns. Outsourcing will improve the operations only to the degree that the program is understood—and supported—by employees. Strategies and management changes should be communicated early on, at all levels of the organization. A regular flow of information and training should follow in order to keep employees motivated and hone their skills.

Outsourcing is not an issue to take lightly. Nor is it for every company. However, marketplace forces make it imperative for all utilities to at least explore outsourcing options and, if appropriate, proceed carefully and wisely.

In an increasingly competitive business environment, outsourcing can cut costs, alleviate headaches and allow for more strategic operations. For many utilities, integrated solutions through outsourcing partnerships can help deliver a competitive advantage—a sure guarantee for corporate survival in the 21st century.

Utilities top record coal use; weather slows recent growth

WASHINGTON—Coal demand and production in 1990, fueled by a greater utility burn, topped 1-billion tons for the first time, according to the National Coal Association. It was the fourth consecutive record year.

Growth in utility coal consumption has slowed due to mild weather, while coal has lost market share as fuel for utility generation since a record 57 percent in 1988. Anticipated 1991 market share is 55.7 percent, NCA said.

NCA attributed the record production, 1.022-billion tons by year-end 1990, to "an increase in utility coal burn, an increase in exports to customers overseas, and to an unusually high demand for coal for utility stockpiles." The forecast for 1990 exceeded 1989 production by 4.2 percent, 41-million tons. Consumption is expected to be 1.002-billion tons.

Year-end 1991 production is expected to decrease slightly, by 1.47 percent, while consumption should increase by 1 percent, NCA said.

Mild weather slows utility growth

Mild weather seems to have contributed to relatively small increases in utility coal use over the past three years, despite setting records, NCA said.

Electric utilities:

- Consumed 766-million tons in 1989, an 8-million-ton, 1.1-percent, increase over 1988.
- Are expected to consume 774-million tons in 1990, an 8-million-ton, 1.0-percent gain over 1989.
- Are expected to consume 787-million tons in 1991, a 13-million-ton, 1.7-percent increase over the 1990 estimate.

The 28-million-ton gains during the years 1988-91, pale compared to the 64-million-ton increase 1985-87.

NCA reports that coal consumption increased at a slower rate than electricity generation, falling from a record 57-percent share in 1988, to 55.9 percent in 1989, and an anticipated 55.1 percent by year-end 1990. NCA said 1991 share of market would climb to 55.7 percent (see table).

Electric Utility Generation Source, Growth

	1988	1989	1990₁	1991₂
Coal	57.0	55.9	55.1	55.7
Oil/Gas	14.8	15.2	13.2	12.9
Nuclear	19.5	19.0	20.9	20.9
Hydro/Other	8.7	9.9	10.8	10.5
Electricity Growth Rate	5.1	2.8	2.8	0.4
GNP Growth Rate	4.5	2.5	1.0	0.5
Coal Consumption (million tons)	758	766	774	786

1) Estimate
2) Forecast

Source: National Coal Association

Penelec reduces staff by 300

JOHNSTOWN, PA—Pennsylvania Electric Co. is reducing staff by 300 employees by the end of April. Eight percent of the 3800 workforce, union and non-union employees, are affected.

Downsizing

"Similar downsizing is occurring throughout the industry and in other businesses," said Penelec President Robert L. Wise. Penelec is a General Public Utilities Corp. subsidiary.

Penelec will offer eligible non-union employees a voluntary enhanced retirement program, adding three years of age and service to those elegible for retirement as of March 31.

Wise said that Penelec also would discuss company retirement incentives with various union representives.

Some restructuring, relocation

"The voluntary retirement program results will be used to determine how many remaining positions need to be eliminated," Wise said. Some restructuring and relocation of employees would also be necessary.

Another GPU company, Metropolitan Edison Co., is also offering voluntary retirement to non-union employees.

Previous cuts

Since 1986, Penelec has reduced its total workforce by more than 500 positions, the majority, non-union, through restructuring, reassignment, attrition and voluntary separation.

New study refutes Navajo effects at Grand Canyon

BARRINGTON, IL— A Salt River Project-funded study completed recently indicates that the Navajo Generating Station (NGS) has *not* been the main culprit in reducing visibility at Grand Canyon National Park. The report is the latest development in the continuing saga of visibility problems at the national park.

Preliminary conclusions from the work, whose analysis and modeling still are in-process, suggest:

- Worst visibilities occurred in the Canyon when NGS emittants were not in the vicinity and when hazy air was coming into the region from the southwest (NGS is east of the Canyon).
- Light-scattering values at the Canyon were no greater when NGS emittants were present than when absent.
- Using tracers alone was inadequate for determining the contribution of individual sources to regional haze.
- Weather conditions that accompanied reduced-visibility episodes during 1990 were similar to conditions that occurred during the previous study—Winter Haze Intensive Tracer Experiment (WHITEX)—and were representative of winters in the Grand Canyon.

Another observation was that long-range transport of pollutants from outside the study area was a substantial source of visibility impairment on several occasions.

Consequently, Salt River Project issued a statement that "Preliminary observations from an extensive study last winter show that control of sulfur-dioxide emissions from Navajo Generating Station would not produce, on average, any significant visibility improvements at the Grand Canyon".

Dr. Prem Bhardwaja, an SRP expert on air quality and visibility and head of the study, stated that the station contributed to impaired visibility only 4-7 percent of the time, including evenings.

He also reported that a team of experts is working on an in-depth analysis "to see how much improvement in visibility would occur if NGS emissions were reduced. These results will be based upon state-of-the-art technology known as 'deterministic modeling'."

Bhardwaja added, "As soon as this report is prepared, it will be reviewed by a team of experts outside of SRP's study team. Results of this peer review will be incorporated in the final report."

The Environmental Protection Agency identified NGS as a major contributor to visibility impairment at the Grand Canyon in 1989, based on the National Park Service's WHITEX experiment. SRP pointed out perceived weaknesses in data reduction and associated conclusions of the WHITEX report to the EPA.

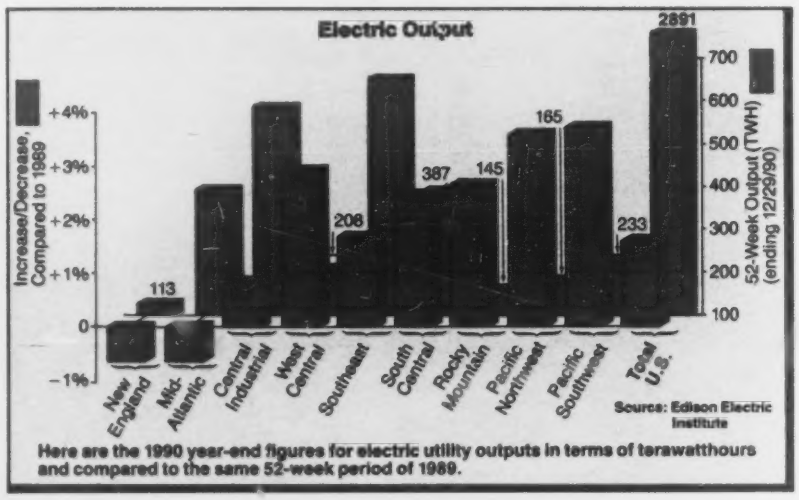
The Dept. of the Interior also was concerned about the WHITEX results and asked the National Academy of Sciences to review the report for scientific accuracy. The National Research Council, an arm of the Academy, issued a report that said NGS was one source of the visibility problem at the Canyon, but concluded the experiment could not reliably determine the amount of the plant's contribution.

The WHITEX report was issued on Dec. 4, 1989. Testing was conducted during January and February of 1987. Its participants concluded that NGS "is the largest single point source of SO_2 emissions in the vicinity of Grand Canyon National Park."

An aerosol tracer was utilized to track the power plant's emissions at one point in the Grand Canyon.

More sites, more data

This newest Salt River study was performed by 100 scientists and technicians from 11 organizations who gathered air-quality samples and meteorological data from 26 sites in and around the Canyon over an 81-day period from Jan. 10 through March 31, 1990.



Here are the 1990 year-end figures for electric utility outputs in terms of terawatthours and compared to the same 52-week period of 1989.

EDF opens office in Washington

WASHINGTON—Electricité de France International has opened a North American office in Washington. EDF officials hope to establish contacts with U.S. and Canadian energy representatives in private utilities and regulatory bodies, exchange information, and create new joint strategies for developing energy resources and protecting the environment.

EDF has been building an exchange program with U.S. energy organizations for several years, which has resulted in 10 representatives located around the U.S. in various positions who are learning about the energy situation in this country and lending their expertise where appropriate. The French national utility also has entered into joint ventures with two U.S. companies, Computer Assisted Trading Co. and Fuel International Trading Co.

Analyzing boiler failures

NAPERVILLE, IL—This field guide of proven methods for identifying boiler failure problems also outlines necessary corrective steps.

Failures occurring in nearly all locations, as well as some preboiler and afterboiler regions, are discussed.

The Nalco Guide to Boiler Failure Analysis, by Robert Port and Harvey Herro, 296 pages, hardcover, $39.95.

Order from Nalco Chemical Co., Attn: Marketing Communications Dept., One Nalco Center, Naperville, IL 60563. Make check payable to McGraw-Hill Book Co.

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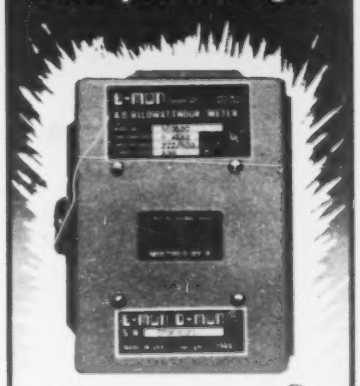

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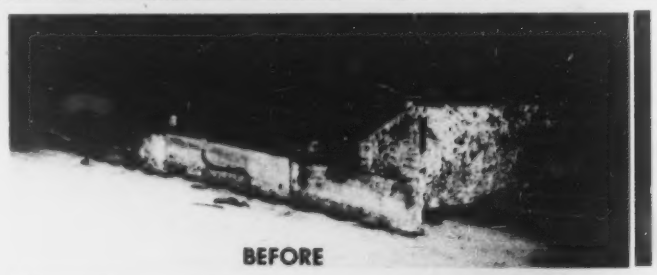
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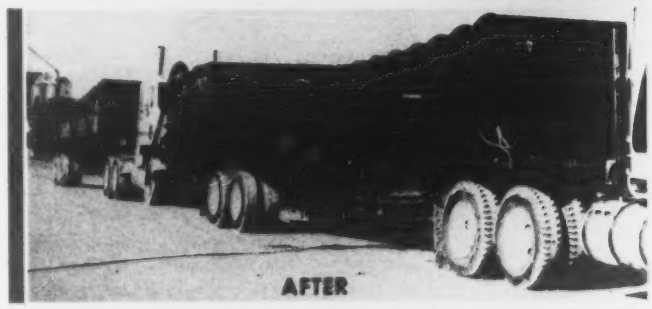
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